

AMENDMENTS TO THE CLAIMS

Please cancel claims 6,11,19,22 and 26 and amend claims 1, 3, 7-8, 12, 20, and 23.

1. (Currently amended) A molding system comprising first and second mold components, at least one of said first and second mold components comprising a generally circular disc-shaped transmissive portion and a masking collar surrounding at least a portion of said transmissive portion having an inner diameter adapted to fit in close engagement with the transmissive portion, wherein said transmissive portion is made from an optically clear material ~~comprises a generally clear, amorphous polymeric material~~ and allows passage of curing energy therethrough, and wherein the masking collar is made from a material comprising a UV-blocker and substantially blocking blocks passage of curing energy therethrough, wherein said masking collar comprises a polymeric material impregnated with carbon black filler, wherein the masking collar generally resembles a washer or a doughnut, with a center hole for receiving the transmissive portion, wherein the transmission portion is pressed into the center opening of the masking collar and the masking collar is mounted within a bushing sleeve, wherein the at least one of said first and second mold components comprises a male mold profile.
2. (Canceled).
3. (Currently amended) The molding system of Claim 1, wherein the optically clear material ~~the generally clear, amorphous polymeric material~~ comprises a cyclic-olefin copolymer.
4. (Canceled).
5. (Canceled).
6. (Canceled)
7. (Currently amended) The molding system of Claim 1 ~~6~~, wherein the curing energy comprises UV light having a wavelength of between about 4 nanometers to about 380 nanometers, and the ring has a thickness of at least about 1000 times the wavelength of the curing energy.
8. (Currently amended) The molding system of Claim 7, wherein the ~~ring~~ masking collar has a thickness of at least about 2mm.
9. (Original) The molding system of Claim 1, wherein the first mold component comprises the transmissive portion and the masking collar, and wherein the second mold component comprises a UV absorber.
10. (Original) The molding system of Claim 9, wherein the first mold component comprises a male mold component, and wherein the second mold component comprises a female mold component.
11. (Canceled)

12. (Currently amended) A mold component for casting and curing a polymeric item, said mold component comprising:

a transmissive portion comprising a generally clear, amorphous cyclic-olefin copolymer transparent to curing energy; and

a masking collar comprising a polymeric material impregnated with carbon black filler ~~wherein the mask collar have an inner diameter adapted to fit fitting in close engagement around at least a portion of said~~ with the transmissive portion, wherein the masking collar generally resembles a washer or a doughnut, with a center hole for receiving the transmissive portion, wherein the transmission portion is pressed into the center opening of the masking collar and the masking collar is mounted within a bushing sleeve.

13. (Canceled).

14. (Canceled).

15. (Original) The mold component of Claim 12, wherein the transmissive portion comprises a male mold profile.

16. (Original) The mold component of Claim 12, wherein the transmissive portion comprises a generally disc-shaped element, and wherein the masking collar comprises a ring surrounding said transmissive portion.

17. (Original) The mold component of Claim 16, wherein the curing energy comprises UV light having a wavelength of between about 4 nanometers to about 380 nanometers, and wherein the ring has a thickness of at least about 1000 times the wavelength of the curing energy.

18. (Original) The mold component of Claim 17, wherein the ring has a thickness of at least about 2mm.

19. (Canceled)

20. (Currently Amended) A molding system comprising:

a first mold component comprising a generally circular disc-shaped transmissive portion and a masking collar having an inner diameter adapted to fit in close engagement with ~~surrounding at least a portion of~~ said transmissive portion, the transmissive portion allowing passage of UV energy therethrough, and the masking collar substantially blocking passage of UV energy therethrough, wherein the masking collar generally resembles a washer or a doughnut, with a center hole for receiving the transmissive portion, wherein the transmission portion is pressed into the center opening of the masking collar and the masking collar is mounted within a bushing sleeve; and

a second mold component comprising a UV absorber, wherein the first and second mold components are engageable to define a mold cavity.

21. (Original) The molding system of Claim 20, wherein the first mold component comprises a male mold profile, and wherein the second mold component comprises a female mold profile.

22. (Canceled)

23. (Currently amended) A method of forming a polymeric molding, said method comprising engaging a first mold component and a second mold component to define a mold cavity, said first mold component comprising a generally circular disc-shaped UV-transmissive portion and a UV-blocking collar having an inner diameter adapted to fit in close engagement with the UV-transmissive portion; wherein said UV blocking collar comprises a polymeric material impregnated with carbon black filler, wherein the UV-blocking collar generally resembles a washer or a doughnut, with a center hole for receiving the UV-transmissive portion, wherein the UV-transmission portion is pressed into the center opening of the UV-blocking collar and the UV-blocking collar is mounted within a bushing sleeve;

depositing a dose of prepolymer material within the mold cavity; and

exposing at least a portion of the prepolymer material to UV energy through the UV-transmissive portion of the first mold component wherein said transmissive portion comprises a generally clear, amorphous polymeric material.

24. (Original) The method of Claim 23, further comprising reducing reflection of UV energy within the mold cavity by incorporating a UV-absorber into said second mold component.

25. (Original) The method of Claim 23, wherein the first mold component comprises a male mold component, and wherein the second mold component comprises a female mold component, and wherein the step of depositing a dose of prepolymer material within the mold cavity comprises depositing prepolymer material within the second mold component prior to engaging the first and second mold components.

26. (Canceled)